

**REMARKS**

Claims 1-32 are pending in this application. Claims 1, 11, and 17 are the independent claims.

Favorable reconsideration of this application, in light of the following remarks, is respectfully requested.

**Claim Rejections - 35 U.S.C. § 103**

Claims 1-16 and 24-30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 1,455,847 to Meutsch ("Meutsch") in view of U.S. Patent No. 4,578,834 to Stumpf ("Stumpf '834"). Applicant respectfully traverses this rejection for the reasons discussed below.

In order to establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), the U.S. Supreme Court in *KSR Int'l Co. v. Teleflex, Inc.*<sup>1</sup> noted that the rejection must establish a reasoning that it would have been obvious for one of ordinary skill in the art to have combined the teachings of the cited document(s). One way to establish this would be to show "some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness" and "identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does."<sup>2</sup> In addition, the cited document(s), when combined or modified, must teach or suggest all of the claim limitations of the rejected claims.<sup>3</sup>

Applicant respectfully submits that the proposed combination of references does not meet these criteria. In particular, the rejection fails to demonstrate that one

---

<sup>1</sup> 550 U.S. at 398, 82 USPQ2d at 1396 (2007).

<sup>2</sup> *Id.*

<sup>3</sup> *In re Vaeck*, 947, F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

of ordinary skill in the art would have combined the teachings of Meutsch and Stumpf '834 in the manner used to reject the claims.

For example, in the outstanding Office Action, the Examiner acknowledges that Meutsch does not disclose "strings interconnected by a surface attachment between abutting surfaces of adjacent strings." However, the Examiner alleges that adjacent strings of Meutsch "could be adhered as disclosed in Stumpf in order to provide Meutsch with the predictable established function of adhesive (which is to keep strings of a mattress together)."<sup>4</sup> Applicant respectfully disagrees.

Applicant respectfully submits that if the proposed modification or combination of the prior art would change the **principle of operation** of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.<sup>5</sup> Applicant respectfully submits that the proposed combination of Meutsch and Stumpf '834 would require a substantial reconstruction and redesign as well as a change in the basic principle under which Meutsch's mattress construction was designed to operate.

As discussed in a previously-filed Response, Meutsch is directed to a mattress to be assembled not during manufacturing, but after having been shipped to its final destination. Thus, the mattress is produced as a semi-finished product, in which empty strings of pockets, springs and lacing are packed separately. The end user assembles the mattress by inserting the springs into the slit openings 13, and the strings are connected to each other by inserting lacing into the openings 16, in various patterns – see, e.g., FIGS. 4-6.

If, however, "glue" were to be used (as alleged by the Examiner), in addition to the lacing, this would first of all be totally superfluous since the lacing 17 (18, 26, 28) is already fully capable of holding the strings together. Further, the slots 16 would also, in this case, not be able to allow an increased interjacent separation distance to be formed between adjacent coil springs. On the contrary, the lacing is arranged around the mattress (see FIGS. 4-6) to maintain the coil springs close together. This is also emphasized on page 2, lines 18-20 in Meutsch, where it is stated that the mattress keeps the springs closely connected. That is, holding the springs in such a close/tight manner prevents forces directly compressing any one or more of the springs from being transmitted to and tilting other springs. The lacing fabric 17 through the slots 16 maintains the springs in their pockets in an upright position and against these forces that act laterally to the springs, tending to distort the shape of the construction in which they are used. See, Meutsch, page 3, lines 5-18. Further, it is apparent from at least FIG. 3 that the slots 16 do not contribute to any separation of the coil springs – i.e., forms an "increased interjacent separation distance (SA)." The slots 16 are solely for the purpose of passing the lacing that closely/tightly holds the coil springs to create a dense mattress.

Furthermore, if glue were to be used instead of the lacing, one skilled in the art would recognize that the purpose of providing the slots 16 would be *destroyed*. The only reason for having the slots 16 in Meutsch is to allow the lacing 17 (18, 26, 28) to be arranged in patterns to interconnect the strips – see, e.g., page 5, lines 37-44. Moreover, the use of glue, instead of the lacing, would make "do-it-yourself" assembly more difficult. Therefore, one skilled in the art would not have replaced the lacing with adhesive in Meutsch, without destroying the reference.

---

<sup>4</sup> See Office Action mailed May 9, 2011, page 2, paragraph no. 1.

Still further, when using adhesive, the adhesive is for obvious reasons, arranged on the abutting surfaces of the pockets – i.e., in the middle of the pockets. This is also taught by Stumpf '834. However, arranging adhesive in this area would be difficult in the strings of Meutsch, since Meutsch already has arranged a large slit (13) in this position. These slits 13 are large, large enough for the springs to be inserted therethrough – i.e., larger than the spring diameter – and necessarily assumes a somewhat opening position after assembly (see FIG. 3). Thus, the strings of Meutsch are *unsuitable* for interconnection by means of adhesive.

Thus, if the strings of Meutsch were interconnected by means of adhesive, the Meutsch mattress would have to be modified in a way that would be totally contradictory to the objects set out to be achieved by Meutsch, and also contradictory to the purpose of having the slits and slots in the strings in the first place.

Contrarily, the features of claim 1 relate to, *inter alia*, making a more cost-efficient mattress and/or requiring less material and easier production. The Meutsch mattress, on the other hand, is a very dense mattress, which requires a very tedious and cumbersome assembly process.

For the sake of argument, if one were to attempt to modify the mattress of Meutsch to make it more cost-efficient, and attempt to use interconnection by means of surface attachments between abutting surfaces instead of the lacing employed by Meutsch, one would still not arrive at the claimed invention. First of all, it would provide a less dense mattress, which would be against the objects of Meutsch. Secondly, it would also be less adapted to remote assembly, which would also be against the objects of Meutsch. Thirdly, there would then be no need for the slits between the pockets.

---

<sup>5</sup> *In re Ratti*, 270 F.2d 810, 23 USPQ 349 (CCPA 1959).

Accordingly, one skilled in the art would have no motivation to modify the teachings of Stumpf '834 with the teachings of Meutsch, since such an alleged combination would destroy the intended purpose of Meutsch, and also, even in doing so, would still not have arrived as the claimed invention.

Further, Applicant respectfully submits that "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggest the desirability of the combination."<sup>6</sup> For example, the sole purpose of the slots 16 in Meutsch is to allow the lacing 17 (18, 26, 28) to be arranged in patterns to interconnect the strips – and not the purpose as taught by claim 1. Therefore, the rejection failed to articulate a proper rationale to support an obviousness rejection.

Still further, if assuming *arguendo* that one skilled in the art would incorporate the interconnection as taught by Stumpf '834, but without the slits, into Meutsch, it is submitted that the skilled person would have no motivation to turn to Meutsch - since Meutsch is using the slits for a totally different purpose, which is not applicable using the Stumpf '834 interconnection, and is also not in any way attempting to solve the objects underlying claim 1. For instance, the features of claim 1 is to provide a more cost-efficient mattress by allowing the springs to be separated from each other, but still being effectively held together. This is provided by use of less material than in prior solutions to make such separations, and therefore enables a more cost-efficient mattress. Further, the features of claim 1 also effectively avoid the problem of so-called "false lofts," which is experienced in other prior art. Still further, the mattress of claim 1 enables a more efficient air circulation through the mattress.

---

<sup>6</sup> *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

Therefore, Applicant respectfully submits that Meutsch and Stumpf '834, individually or in combination, would not derive at the claimed invention.

In view of the above, Applicant respectfully submits that one of ordinary skill in the art would not have combined the teachings of Meutsch and Stumpf '834 in the manner used to reject the claims, and that the proposed combination of Meutsch and Stumpf '834 fails to teach or suggest *all* of the elements of claim 1 and somewhat similar features of claim 11. Thus, no *prima facie* case of obviousness has been established. Accordingly, claims 1 and 11 are allowable over the Meutsch and Stumpf '834. Dependent claims 2-10, 12-16, and 24-30 depends from either claim 1 or 11 and are allowable for at least the reasons that claims 1 and 11 are allowable.

Therefore, Applicant respectfully requests that the rejection of claims 1-16 and 24-30 under 35 U.S.C. § 103(a) be favorable reconsidered and withdrawn.

Claims 17-23, 31, and 32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,986,518 to Stumpf ("Stumpf '518") in view of Meutsch and Stumpf '834. Applicant respectfully traverses this rejection for the reasons discussed below.

In the outstanding Office Action, the Examiner alleges that:

[o]ne of ordinary skill in the art would have recognized that slits (and the associated machinery needed to create them) such as Meutsch's could be added to the apparatus of Stumpf ('518) to provide Stumpf with the predictable established function of the slits (which is to allow the springs to flex in relation to one another).<sup>7</sup> (*emphasis added*)

However, Applicant respectfully submits that a *prima facie* case of obviousness has not been established.

---

<sup>7</sup> See Office Action mailed May 9, 2011, page 5, paragraph no. 2.

As discussed above, even if one could provide slits in Stumpf '518, there is simply no motivation to combine the references. The allegedly "predictable established function of the slits" is far from obvious. In Meutsch, the only intended purpose provided by the slits is that they allow the lacing 17 (18, 26, 28) to be arranged within and around the mattress. This lacing interconnection provides a dense mattress with a certain degree of individual resilience in the springs – when compared to the prior art discussed, where the upper and lower coils of all neighboring springs are clamped together. It is far from obvious, and apparently not at all true, that the Meutsch mattress, having the slits, would have a higher degree of flexibility than the Stumpf '518 mattress not having any slits. On the contrary, the Stumpf '518 mattress is presumably much more flexible. Further, no specific functionality of the slits is at all discussed in Meutsch (apart from allowing the lacing).

Contrarily, the functionality obtained by means of the slits as taught by claim 17 *viz. inter alia*, to obtain a more cost-efficient mattress, requiring less material and easier production, is not disclosed in any of the cited documents, and is far from obvious.

Further, the Examiner must make "*explicit*" the rationale of "the apparent reason to combine the known elements in the fashion claimed," including a detailed explanation of "the effects of demands known to the design community or present in the marketplace" and "the background knowledge possessed by a person having ordinary skill in the art."<sup>8</sup>

It is respectfully submitted, however, that the above statement is merely conclusory and does not comprise "*some articulated reasoning with some rational*

---

<sup>8</sup> *Id.*

*underpinning to support the legal conclusion of obviousness*<sup>9</sup> as required by *KSR Int'l*. Therefore, because the Examiner has not provided an explicit analysis as required by *KSR Int'l*, a *prima facie* case of obviousness has not been established.

For at least all these reasons, Stumpf '518, Stumpf '834 and Meutsch, alone or in any combination, fail to render the limitations of claims 17 obvious to one of ordinary skills in the art. Claims 18-23, 31, and 32, dependent on independent claim 17, are also allowable at least for the reasons given above with respect to claim 17 and also on their own merits.

Applicant, therefore, respectfully requests that the rejection to claims 17-23, 31, and 32 under 35 U.S.C. § 103(a) be withdrawn.

**Request for Interview**

Applicant respectfully requests, prior to the issuance of an action on the merits, that the Examiner grant an interview (telephonic or in-person) with Applicant's representative in order to discuss the Office Action, and the differences between the cited prior art and the subject matter cited in the claims.

Applicant's representative will telephone the Examiner in the near future in an attempt to schedule this interview. However, as Applicant's representative cannot anticipate when this action will be scheduled for further action by the Examiner, it is requested that the Examiner contact Applicant's representative by telephone, at the number given below should a specific date for the interview have not been scheduled when the Examiner takes this action up for further action. Every effort will be made to meet the Examiner's scheduling preference.

---

<sup>9</sup> *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006).

**CONCLUSION**

In view of the above remarks and amendments, Applicant respectfully submits that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. Further, the above remarks demonstrate the failings of the outstanding rejections, and are sufficient to overcome the rejections. However, these remarks are not intended to, nor need they, comprehensively address each and every reason for the patentability of the claimed subject matter over the applied prior art. Accordingly, Applicant does not contend that the claims are patentable solely on the basis of the particular claim elements discussed above.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant hereby petitions for a three (3) month extension of time for filing a reply to the outstanding Office Action and submit the required \$635.00 extension fee herewith.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned, at the telephone number below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By

John A. Castellano, Reg. No. 35,094

P.O. Box 8910  
Reston, Virginia 20195  
(703) 668-8000 1309414.1

JAC/DJC:has